

# Water

EDUCATION PROGRAM 2008 – 2009



# Dear Teachers,

**T**he Water Education Program is designed to foster an appreciation of the value of water as an important natural resource. Water conservation and stewardship of our local watersheds is promoted throughout the program. Students are encouraged to use water wisely and make environmentally sustainable choices to help secure a reliable source of freshwater now and in the future.

**Our programs and materials are FREE to teachers in our service area** and are made possible through the Sonoma County Water Agency and your local water providers. We provide engaging lessons and hands-on activities that present the hydrologic cycle, physical properties of water, water supply systems, treatment of wastewater, and pollution prevention. The curriculum materials and instructional visits listed in this packet have been carefully developed to support the existing California State Frameworks and are aligned with the California Science Standards.

At our Russian River Field Study Site in Forestville, we will be offering a **fifth-grade** program that focuses on the source of the students' drinking water, water quality, salmonids, watershed dynamics and water conservation. For **sixth graders** we are presenting an exciting new wetlands education program where students will explore the links between wastewater treatment, recycled water and wetlands. This program will be held outside the City of Sonoma. For **third-grade students** we will continue to offer a two-lesson sequence held at the school site that focuses on the water cycle, animal and plant adaptations as well as water and energy conservation. Each grade level lesson supports the California Science Standards and is designed to be developmentally appropriate.

Curriculum materials and student incentives are available for grades K – 12. **We also are sponsoring a fabulous assembly program,**

## Our Water Education Program includes:

- Classroom instructional presentations
- Field study opportunities
- School-wide musical assemblies
- Teacher training and workshops
- Free curriculum materials
- A lending library of videos, interactive models, books and printed materials
- Production of the *Hydro Herald Newsletter*
- Endorsement, participation and financial sponsorship of events and workshops



**The Musical Watershed**, that focuses on sustainability, water pollution, recycling, watershed ecology, storm drain run-off, sanitary sewer systems and water conservation.

To assist you as educators, we have some terrific **workshops** scheduled this year. We are offering a new workshop titled **Water In Sonoma County** and have updated our **Project WET** (Water Education for Teachers) workshop to address local water issues and concerns. For detailed descriptions and dates please refer to the teacher workshop section of this brochure.

**Another great teacher resource is our Lending Library.** In addition to the videos and models we have loaned out in the past, we have expanded our lending library to include books. We now have an actual library where you can come and fill up a book bag with water books, preview videos, or check out classroom sets of student guides. Also on display are samples of our student workbooks, curriculum guides, maps and student incentives. The Lending Library is open M – F from 8:00 a.m. to 5:00 p.m. and is located at 404 Aviation Boulevard in Santa Rosa. We have also included an order form in this brochure where you can request items to be mailed to you.

We hope that you will **look to us as a resource for water education**, whether it is teacher workshops, curricula, supplemental materials or directly working with your students.

To schedule classroom instruction, outdoor field study instruction, order education materials, lending library materials or sign up for a workshop, please fill out the request forms included at the back of this booklet, or visit our website at [www.sonomacountywater.org](http://www.sonomacountywater.org) and click on the education tab. For additional information or questions please call our staff at (707) 526-5370.

*Cary Olin* *Brian Michelsen* *Dan Kahane*

Water Agency Programs Specialists  
Cary Olin, Dan Kahane, Brian Michelsen





ZunZun Musical Assembly Rocks and Inspires

## FIRST GRADE

### Water Fun For You

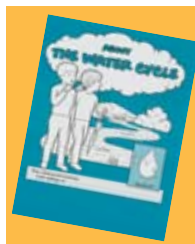
A book filled with coloring pages, crossword puzzles and word games for younger children. Topics include “water words,” the different forms of water, salt and fresh water, and how we get our drinking water. (16 pages)



## SECOND GRADE

### About the Water Cycle

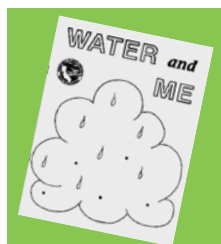
Using puzzles, games, and coloring activities, students learn how water cycles through the environment and what they can do to help keep water clean and use it wisely. (8 pages)



## KINDERGARTEN

### Water Is Your Best Friend

A delightful coloring book that teaches the three forms of water and how we use water in our daily lives. (13 pages) Includes teacher's guide.



### Water and Me

Through puzzles, games and activities, this useful coloring book teaches conservation concepts. Emphasis is on the uses of water, the three forms of water, the importance of clean water and the water cycle. (16 pages)

## GRADES 1 & 2

### Environmental Discovery Center

Field study programs are being offered at the Environmental Discovery Center at Spring Lake Regional Park. For more information or to schedule a visit please call the Environmental Discovery Center at (707) 539-2865.



## THIRD GRADE

### Water Play Juegos de Agua

A colorful activity book about water. It includes messages to be decoded, puzzles, crosswords, and mazes. (15 pages)

(available in English & Spanish)



## Grade 3: Classroom Instructional Series



This program includes two, 60-minute lessons conducted by Water Agency staff in your classroom. Through hands-on experiments and discussions, students explore how their attitudes and daily habits affect their water supply source. The topics covered include:

- What is water and how does the water cycle work?
- How do living things adapt to obtain and use water?
- How do we manage our water resources for the community?
- How to conserve water.

This program is available during the months of December, January, February and early March. We are able to visit three classrooms at a school. Please coordinate with other teachers at your site before signing up (see request form included in this packet). This classroom series supports the California Science Standards.

## FOURTH GRADE

### California Water Story

Contains a California Water Map, teacher's guide, trivia game, poster and video. Concepts emphasized are California geography, hydrologic cycle, history of water use in California, water use today, personal water conservation, and protecting the quality of water. (One per classroom)

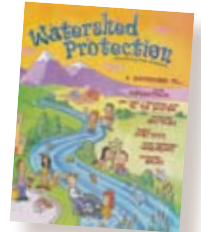


### Conserve Water

This full color 16-page booklet contains games, puzzles and activities designed to teach students about water conservation.

### Watershed Protection

This colorful booklet features creative hands-on investigations, educational games and stories that answer the following: What is a watershed? How can you protect a watershed? What habitats support different plants and animals? (16 pages)



For information on the annual 3rd and 4th grade Water Awareness Poster Contest see the last page of this brochure.





## Grade 5: Field Study Program

### ***How Do We Get Our Drinking Water?***

Bring your class out to the Russian River and our groundwater pumping facilities to experience firsthand the source of our drinking water. The program consists of a one hour pre-site visit to your classroom by Water Agency staff and a follow-up field trip to the Russian River. We will focus on the Sonoma County Water Agency's water supply and transmission system, water quality testing and the natural history of salmon and steelhead in the Russian River Watershed. Students practice their lab skills by collecting water samples and performing hands-on water quality testing. They use microscopes to observe the variety of aquatic macroinvertebrates that provide food for larger creatures throughout the river ecosystem. **FREE** buses are provided for the field trip. We are able to accommodate two classrooms from a school site. This program is available during the months of September, October, November, March, April and May.

## **FIFTH GRADE**

### **The Story of Drinking Water Grades 5-9**

This engaging booklet addresses the importance of water to all living things. Topics include the physical and chemical properties of water, hydrological cycle, water supply, treatment and distribution of water and water conservation. (16 pages) Includes teacher's guide.



### **Captain Hydro – Grades 5-7 El Capitán Tlaloc**

A carefully crafted story featuring Captain Hydro, hero of water conservation, who battles his relentless foe, the Water Bandit. This action-packed comic book is full of activities that compare and contrast natural and man-made water cycles, study water supply issues and problems, depict treatment of drinking water and wastewater, and review the consequences of water pollution. (40 pages) Teacher's guide includes follow-up activities and an extensive water bibliography. **(available in English & Spanish)**





## Grade 6: Field Study Program

### ***Water, the Ultimate Recycled Resource***

Wetlands ecology, recycled water and sanitation are the themes woven throughout this component of the Water Education Program. A one hour pre-site visit to the classroom by Water Agency staff is followed by a field trip to the Sonoma Valley Wastewater Treatment Plant and Hudeman Slough where recycled water from the treatment plant is used for wetlands enhancement and restoration. This unit gives students a better understanding of where their water goes when it goes “down the drain” and introduces them to all the positive uses of recycled water, the interconnectedness of the water in our environment, and the sustainability of water resources in the area. At the field study site, emphasis is placed on what makes a wetland ecosystem distinctive, and why wetlands are important. Students will investigate wetland plants and soils, and will be provided with binoculars to observe the diverse wildlife living and foraging in this habitat. This program is available during the months of September, October and November. **FREE** buses are provided for the field trip.

## SIXTH GRADE

### **Discover Storm Water**

This full color activity book features informative text and activities designed to teach awareness of storm water and how to prevent pollution. (16 pages)



### **Recycled Water**

This stylized workbook includes information, puzzles, and mazes featuring the water cycle and the water “recycle.” The activity book guides the students down the drain and through the sewer system to the “water laundry” and shows how wastewater is cleaned and can be used again.

## GRADES 7 – 12

### **Project Water Science**

Project Water Science offers lesson plans for the study of water chemistry and how water relates to the environment. It includes a lesson plan book for teachers with 14 laboratory exercises suitable for junior high and high school science classes in either physical, earth or integrated science and is correlated to California State Science Standards. (One per classroom)



### **Groundwater Education for Secondary Students**

This is a great resource for teaching middle and high school students about groundwater and the prevention, reduction and elimination of



groundwater pollution. The 52-page booklet contains lesson plans, lectures, demonstrations, laboratory exercises, games and assessment activities. Each lesson has clearly defined objectives, complete teacher instructions and is correlated to California State Standards for Science. The lessons are designed to teach the following concepts: What is groundwater? What is an aquifer? What is the relationship between ground and surface water, and the importance of conserving groundwater? The Water Wonder Workout game is included and is a fun way for students to learn about drinking water quality. This guide also includes a California Groundwater Map. (One per classroom)

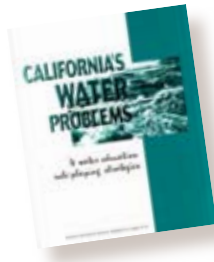
*(See the lending library section in this brochure for a groundwater model that can be checked out for a two week period.)*



## GRADES 9 – 12

### California Water Problems

California Water Problems is a series of four role-playing scenarios designed to give students first-hand experience at working out a solution to real-life problems involving the management of California's water. (One per classroom)



### Dig In! Hands-On Soil Investigations (NSTA Press) Grades K-4

Give students the dirt on soil with 12 hands-on activities. Students will soon be up to their elbows in the study of soil formation, habitats and land use, animals that depend on soil, plants that grow in soil, soil science, and soil conservation. Each lesson plan offers helpful background, assessment methods and suggestions for further exploration.

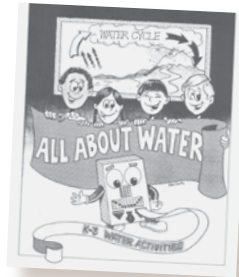


## CURRICULUM GUIDES

These guides are designed to provide lessons and background information for teachers. Some guides include reproducible pages for student use.

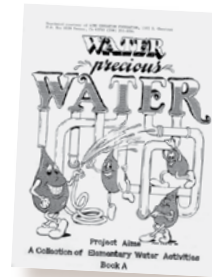
### All About Water Grades K-3

This 100-page reproducible curriculum guide contains 26 water-related activities and science experiments that involve students in observing, communicating and comparing. The activities are interdisciplinary and can be used with science, art, math, social studies, music and language arts. Topics include water quality, the water cycle, fresh water and salt water, water conservation and water distribution.



### Water Precious Water Grades 2-6

An AIMS booklet with “hands-on” water projects for the classroom. Students uncover a variety of interesting facts about water by conducting a series of four activities that focus on some of the properties of water.



### Aquatic Habitats (GEMS) Grades 2-6

This guide features a selection of educational life science activities which illustrate the dynamic interactive nature of living ecosystems. Student groups set-up and observe living models of a pond in the classroom.



### Liquid Explorations (GEMS) Grades K-3

Set-up your classroom with a series of fun, engaging activities in which students explore the properties of liquids. This guide is a fluid way to introduce younger students to the properties of matter and is an excellent physical science unit for primary grades.



### Schoolyard Ecology (GEMS) Grades 3-6

This guide is designed to spark student curiosity about the patterns and interactions in nature, beginning with their immediate environment—the schoolyard.

## MAPS, POSTERS, AND FOLDERS



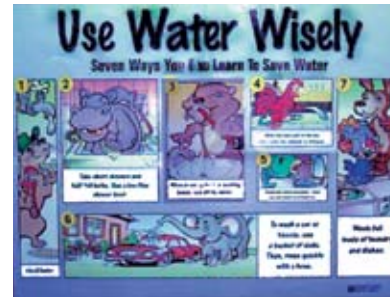
**Russian River Watershed Map**  
**All Ages**

This 24" x 36" three-color map highlights the major and minor waterways that flow through the Russian River Watershed.



**Russian River Relief Map**  
**All Ages**

This colorful 24" x 36" map shows the topography of the Russian River Watershed.



**Use Water Wisely Poster**  
**Grades K-3**

A colorful and humorous 18" x 25" poster with seven illustrations of how to use water wisely. The reverse side offers a discussion guide and extension activities promoting water conservation.



**Pocket Folders – All Ages**

"Water Science A – Z" is the theme of these vibrant folders. They feature the inspiring art and water wisdom of children. (printed area 12" x 18")



**Water in Sonoma County Poster**  
**All Ages**

This 24" x 36" schematic illustrates both how we get our water in Sonoma County and the different ways we reuse it.



**California Water Map – All Ages**

This 24" x 36" full-color map features natural and man-made water resources in California. Water facilities are color coded to indicate federal, state and local projects and "wild and scenic" river systems. The San Francisco Chronicle hails it as the "best water map in the state."

(available in English & Spanish)



# STUDENT INCENTIVES ARE AVAILABLE IN CLASS SETS



5th Grade Field Trip: Using the Microscopes



## Use Water Wisely Animal Stickers All Grades

Colorful stickers with water conservation messages.

## Rain Gauge – All Grades

Involve your students in water science by measuring, recording and graphing rainfall.  
(one per classroom)



## Pencil Sharpener All Grades

Blue rectangular  
1-3/4" x 1-3/8"



## Fish Erasers – All Grades

## Rulers – All Grades

12" flexible vinyl ruler imprinted with water conservation tips; scaled in inches and centimeters.



## Fish Tattoos – All Grades



## Static Water Conservation Stickers – All Grades

Assorted static stick-ups with water conservation themes can be used on mirrors or windows.

## Pencils – All Grades

Imprinted pencils remind students of the importance of water.



## Magnet – All Grades

Colorful magnet reminds us all to use water wisely.





## Musical Watershed Assembly Program

**ZUNZUN** is bringing their **Musical Watershed Assembly** to schools in Sonoma and Marin Counties. This 45-minute assembly engages students with musical segments focused on sustainability, water pollution, recycling, watershed ecology, storm drain run-off, sanitary sewer systems and water conservation. **Students are made aware of how their actions impact the watershed around them and what they can do to help preserve and protect it.** Students and teachers are active participants in the program getting up on stage, singing, dancing, and playing a variety of folkloric instruments. ZunZun's programs are always lively, participatory, multilingual (Spanish, Portuguese, English) and energetic. This highly acclaimed group has performed in 14 countries throughout the Americas and have appeared on regional, national and international radio and television. This assembly program is sponsored by the Sonoma County Water Agency and is **FREE** to participating schools. Please contact the SCWA Education Program for additional information.



## Water in Sonoma County

Recommended for educators of grades 2-6

Where does our drinking water come from? What is the difference between sewers and storm drains? Where does the creek ultimately flow that is next to your school or your home? What is the connection between water and energy? This thematic hands-on/minds-on workshop is designed to explore all of the above and more....



In the course of this training you will have the chance to participate in several activities designed to help you teach your students about the water cycle, the history of the Russian River Watershed, the source of our drinking water in Sonoma County, and the importance of conservation. We will provide you with educational posters and standards-aligned materials to support water education in your classroom.

### We will be holding this workshop on:

**Wednesday, October 29, 2008**

3:00pm – 6:00pm

At: Sonoma County Water Agency  
404 Aviation Boulevard, Santa Rosa, CA

Or if weekends work better for you:

**Saturday, November 8, 2008**

9:00am – 12:00pm

At: SCWA Russian River Field Study Site  
9750 Wohler Road, Forestville, CA

Drinks and snacks will be provided.



**Workshop Sign Up:** To register for one or more of our workshops: Use the request form in this brochure or register online @ [www.sonomacountywater.org](http://www.sonomacountywater.org) Once we receive your registration, a confirmation and location map will be mailed to you. Questions? Please call the Water Education Program at (707) 521-6211 or 521-6209.

**NEW: LOCALLY FOCUSED**

**New**



Recommended for  
K-12 educators

**Saturday, February 28, 2009**

**9:30 – 3:30**

Immerse yourself in water issues with our new locally-oriented Project WET workshop. The goal of Project WET is to promote awareness, appreciation and knowledge of California's water resources. We have tailored the workshop to our region with activities that highlight local water issues and concerns.



**The Project WET guide  
includes over 90 innovative activities  
that are hands-on, easy to use and fun!**

Project WET is correlated to California State Standards as well as the proposed EEI (Education and the Environment Initiative) Standards and can be used when teaching science, math, language arts, social studies and environmental studies. All participants will receive a Project WET curriculum guide. Teachers can earn (.6) CEU credit through UC Davis for attending this workshop. This workshop is being held at the Sonoma County Water Agency Russian River Field Study Site, 9750 Wohler Road, Forestville.

Lunch and snacks will be provided.

## *We invite you to visit our NEW Lending Library*



**I**n addition to the videos and models we have loaned out in the past, we have expanded our lending library to include books. We now have an actual library where you can come and preview videos, fill up a book bag with water related books, or check out classroom sets of student guides. If visiting us does not work into your schedule you can still call us at 521-6211 or 521-6209, and we can send you videos or put a bag of books together for you. Models are available by phone reservation, and all materials are loaned for a two week period.

Also on display are samples of our student workbooks, curriculum guides, maps and student incentives if you would like to review them before ordering sets for your class.

**The Lending Library is open M – F from 8 a.m. – 5 p.m. and is located at 404 Aviation Boulevard (off Airport Boulevard in Santa Rosa).**

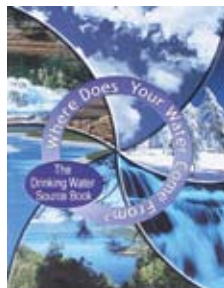


### **Hydroexplorer Comes To Your Home (IBM & MAC) – Grades K-5**

This computer game is designed to teach elementary students about water conservation, pollution prevention, the water cycle and how water gets to the home. Players search for clues as they guide the mini-sub from a rain cloud through the maze of water pipes underground through the treatment plant into a house. Players seek to make wise water use choices.

### **Resources for Environmental Literacy Grades 6-12**

The National Science Teachers Association Resources for Environmental Literacy, assists teachers in fostering students understanding of the natural world, from a scientific point of view. This book is broken into five teaching modules: Biodiversity; Global Climate Change; Earthquakes, Volcanoes and Tsunamis; Genetically Modified Crops; and Radioactive Waste. The book does not encourage students to take a particular stand on these subjects, instead it promotes critical thinking and analytical reasoning with regards to complex issues.



### **Classroom set of “Where Does Your Water Come From?” The Drinking Water Source Book Grades 5-8**

This 32-page informative booklet is designed to teach students about the sources of drinking water. Children learn about the water cycle, watersheds, surface water, groundwater, aquatic ecosystems, water quality and its effect on living things.



### **Complete Set of Layperson's Guides from the Water Education Foundation Grades 9-Adult**

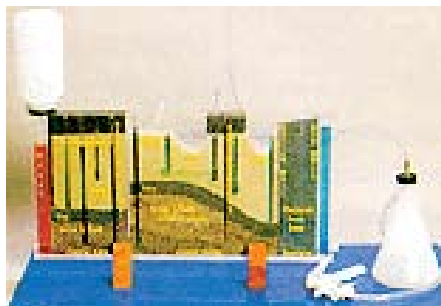
A series of 16 booklets which explore pertinent water issues in an easy-to-understand manner. Topics include: Drinking Water, California Water, Groundwater, Flood Management, Water Conservation, Environmental Restoration, The Delta, The Colorado River, The Central Valley Project, Agricultural Drainage, Nevada Water, Water Recycling, Water Rights Law, Water Pollution, Water Marketing, San Francisco Bay.



### **MTBE Risks and Issues Grades 8-12**

This curriculum, MTBE Risks and Issues: Setting Taste and Odor Drinking Water Standards, combines experiments and reading material to teach students about MTBE, methyl tertiary butyl ether, in drinking water. The lesson booklet teaches students about MTBE as a drinking water contaminant, how taste tests are conducted, how drinking water standards are set, and the role of science in public policy.





### Groundwater Model – Grades 5-Adult

This interactive sand-tank model is designed to simulate some of the groundwater conditions common throughout California. The model can be used to demonstrate how water moves through different kinds of aquifers under a variety of conditions, as well as the connection between surface and groundwater. There are four types of aquifers displayed by the model: Coastal drainage basins, Western and Eastern Central Valley and the fractured rock zones of the Foothill and Mountain regions. The model comes with a video tape and 18-page lesson plan book.



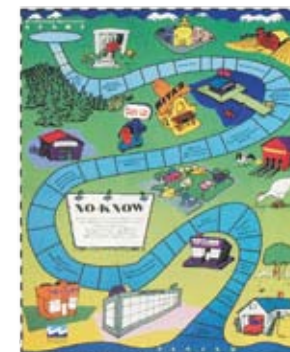
### Cal Alive – Grades 4-8

This comprehensive learning package incorporates three CD-ROMs, a Classroom Guide, a Teacher Resource Guide, and an interactive website to teach 4<sup>th</sup> through 8<sup>th</sup> grade students about California's rich biological diversity.



### No-Know Game Grades 5-Adult

This 17 x 22 inch plastic mounted board game teaches children and adults about the source of their drinking water, what pollutants water may encounter as it moves through the watershed, and how to avoid contributing to nonpoint source pollution. Game comes with four playing pieces, dice and 64 game cards.



### Enviroscape Model – Grades 3-Adult

This tabletop watershed model depicts a community and a local water supply source. It is an interactive model where students can create pollution events using Kool-aid and cocoa to simulate pollution from pesticides, nutrients, sediments and other contaminants. Students then create a rainstorm over the community with a spray bottle and watch what happens to the local water supply. This model teaches what causes pollution and communicates to people of all ages that we can share in the solution to water pollution by changing our daily habits. (Includes a teaching manual.)



*Book bags can be assembled by specific or general subject matter and are available for grades K-12 at our lending library. Order form is at the end of this booklet. **For videos see next page.***

# Videos / DVDs



*Most features are available in VHS and DVD and are loaned for two weeks.*

## **Life Cycle of the Salmon • All Ages**

This video captures the salmon story with remarkable images that reveal the salmon's world, often from their underwater point of view. A clear, informative narration complements the video and makes the program suitable for viewers of all ages. 6 minutes.

## **Professor Water and the Amazing Water Cycle • All Ages**

Question: "What's the formula for water?"

Answer: "H, I, J, K, L, M, N, O." (You know, "H" to "O")

He's weird! He's wacky! He's the water-guy! Professor Water returns with more fun-tastic facts about the liquid everybody knows and loves (except at bath time), Water! Join the mad Professor and a cohort of kids as they ride the wondrous Water Cycle! Kids will keep learning even after they leave the classroom. Includes teachers guide. 28 minutes. — VHS only

## **Professor Water: Fantastic Facts About H2O • All Ages**

An entertaining and educating video for kids of all ages! Join Professor Water and his wily sidekick as they take viewers from Niagara Falls to the South Pole to Death Valley to the O.K. Corral. You'll pick up a world of information on water cycles, water treatment, and water wonders along the way. 28 minutes. — VHS only

## **Water – Who Needs It? • Grades K-6**

A fun-filled learning and activities video where children learn the importance of water to living things, how fresh water is used every day, and how each of us can protect and conserve water. 14 minutes.

## **Water Follies: A Soak Opera • Grades K-12**

Classic, amusing, award-winning cartoon demonstrates the uses and abuses of water in and around the home. The cartoon carries a strong water conservation message without using any narrative. 7 minutes.

## **Take A Look at Rain • Grades 2-6**

Meet Jeffrey, who isn't very excited about spending a rainy day indoors. His day is well spent, however, learning why the water cycle is important to all living things. 10 minutes.

## **Whaddya Know About H2O? • Grades 3-8**

This exciting video educates young viewers about water conservation, its characteristics, and its role in society through 30 individual, one minute segments. It contains compelling visuals, real-world examples, fun facts, and a teacher's guide. 30 minutes. — VHS only

## **Our Water Cycle • Grades 4-6**

All living things need water, so why don't we run out of water?

This exciting video takes you on the wildest ride of all—the earth's water cycle. You'll go up miles into the troposphere as water vapor, then plummet back down to earth as rain or snow and eventually ride the cycle all the way to the ocean or even soak down deep under the earth's surface. 12 minutes. — DVD only

## **The Water Cycle • Grades 4-6**

This engaging video shows how the water cycle works and how water is cleaned, treated and delivered to your home. Three experiments are included that demonstrate groundwater storage, how the sun affects the water cycle and how using sand and gravel helps to clean the water. 12 minutes.

## **Science Court: Water Cycle Video • Grades 4-6**

Is there water in the air? Science court finds out! Courtroom drama, animation and humor are used to convey the scientific concepts of the water cycle, condensation, evaporation and states of matter. 22 minutes.

## **The Groundwater Adventures of Walter Wet • Grades 4-6**

This cleverly-animated video brings to life the nature and importance of groundwater and includes excellent conservation tips. 12 minutes.

## **Inside the Weather • Grades 4-6**

The weather: always changing, always interesting, always in the news. Through colorful and stimulating visuals with fast paced explanations, students will see how water, air and heat from the sun create weather, how clouds form and move and why some precipitation falls as rain and some as snow or hail. 15 minutes. — DVD only

## **Fountains of Columbia • Grades 4-6**

An interdisciplinary study of water and the California Gold Rush. This docudrama is a depiction of life in the Sierra Nevada foothills during the Gold Rush of the mid 1800s, and the importance of water to the settler's survival, all told from the viewpoint of an 11 year old girl. Teacher-student lesson plan book is included. 11 minutes.

## **Conserve Everyday • Grades 4-8**

Fourth through eighth graders learn many ways to conserve water inside and outside the home, plus many interesting facts and figures about home water use. The hosts are three seventh-graders who demonstrate water-saving techniques in the kitchen, bathroom, laundry room, and yard. Shot in a "kid-friendly" style, the video is segmented in four short parts for watching separately or in one viewing. 16 minutes.

## **Waterhog Haven • Grades 4-9**

This humorous video stars the "Common Waterhog" doing his thing: wasting water. Led by this infamous waster, no one practices water conservation and the town of Waterhog Haven eventually faces a dilemma. 6 minutes.

## **Down the Drain • Grades 4-9**

Narrated by well-known child-spokesperson, Stephanie Yu, this video uses an investigative news format to teach children about the water cycle, water pollution, and water treatment. 30 minutes.

## **High School Video Contest • Grades 9-12**

The Russian River Watershed Association sponsors a high school video contest each year in celebration of Water Awareness Month. See the winning videos produced by local high school students.

## **The Russian River – A Historical Perspective Grades 4-adult**

This video is an entertaining and educational journey through the river's past told through the stories of people who live along the river. 22 minutes.

## **What Do You Know About H2O? • Grades 4-adult**

Filled with fun and interesting facts about water. Narrated by TV commentator Dr. Frank Field, it points out some amazing statistics about how much water we use and waste. 22 minutes.

## **The Story of Streams • Grades 5-9**

A video field trip that takes students on an exploration of streams. The emphasis is on stream features that students can see and experience. Students are challenged to think about how streams have helped shape the land, and are introduced to the physical features of streams and to the influence of streams on the history of North America. 15 minutes.

## **Go With the Flow • Grades 5-12**

Teenage actors explain the water cycle and the difference between sewer drains and storm drains and that storm drain water is not treated prior to running into a river or other waterway. 7 minutes.



### **Eyewitness Pond & River Video • Grades 6-9**

Based on the revolutionary Eyewitness book series, this video takes you on a twisting journey down the great rivers of the world. Viewers are given lots of fun facts spotlighting wildlife, plant life and natural wonders. Historical references and mythical stories are used to emphasize the interdependence between water and life. 35 minutes.

### **Water: To the Last Drop • Grades 6-12**

This Discovery Channel production takes viewers to Canada, the United States, Mexico and the Middle East to study the natural history of water and to investigate the latest technologies used to make water safe. 51 minutes.

### **Setting A Course – The California Bay Delta • Grades 7-12**

The California Bay Delta is the vital source of drinking water for 22 million people in the state and for irrigation of 4 million acres of farmland. This public television program, narrated by Timothy Busfield, explores the Delta's evolution from a natural to a highly engineered water delivery system. Includes viewer's guide. 1 hour.

### **The Hydrologic Cycle: Water in Motion • Grades 7-12**

Developed for junior high and high school students, this video describes how water moves through the hydrologic cycle and shows how natural events affect evaporation, condensation, precipitation, runoff, and storage. 20 minutes.

### **H2O – 2010 • Grades 8-12**

High school students are transported to the year 2010, and discover there is not enough water in California to sustain the population. Designed to get students thinking about the issues around water and its use. Includes a teacher's guide and study activities supporting the concepts. 25 minutes.

### **The Fate of the Jewel • Grades 9-12**

A public television production hosted by actor Bruce Dern focuses on the decline in water quality of Lake Tahoe and the multi-stakeholder effort to stop and reverse this decline. Includes viewer's guide with background information, historic timeline and teacher's lesson. 57 minutes.

### **Groundwater Quality: Managing the Resource Grades 10-12**

This video explains the importance of groundwater, defines technical terms, describes sources of groundwater contamination, and outlines steps communities can take to protect underground aquifers from pollutants. 15 minutes.

### **Conjunctive Use: A Comprehensive Approach to Water Planning • Grades 10-12**

This video simplifies the concept of conjunctive use—coordinating surface water and groundwater supplies, which are often managed as separate resources. 11 minutes.

### **California Water Recycling • Grades 10-12**

What is water recycling and why are communities in California turning to water recycling as part of their water supply source? This video explains how treated wastewater is recycled and reused and simplifies the often-misunderstood concept of water recycling. 25-minutes.

# CONTESTS

## Looking Ahead: May is Water Awareness Month



### **Poster Contest for 3<sup>rd</sup> & 4<sup>th</sup> Graders**

In honor of Water Awareness Month the Sonoma County Water Agency and your local water suppliers sponsor a poster contest for 3<sup>rd</sup> and 4<sup>th</sup> graders. Winning entries are then featured in the following year's Water Awareness Calendar. Additional information will be coming to your school in February outlining this year's theme, contest rules and submission deadline.

## **Need another order form?**

Go to: [www.sonomacountywater.org](http://www.sonomacountywater.org) where you can print out the form you want from the catalog pdf. You can also place your order using an on-line request form. Both are found in the Education section of the website.



*A scene from one of last year's videos*

### **Video Contest for High School Students**



In honor of Water Awareness Month, the Russian River Watershed Association sponsors

a video contest for high school students. Cash awards are split between the students who create the winning video and the high school they attend. The winning videos are then used as public service announcements and as educational outreach materials. Specific information on this contest will go out to area high schools in January. To view past winning videos go to our website at [www.sonomacountywater.org](http://www.sonomacountywater.org) or check out these videos at the lending library.

## FREE CLASSROOM MATERIALS

(You must be teaching the grade level of the materials you are requesting)

### Student Workbooks (one per student)

**Grade Level** **Quantity**

◆ Kindergarten  
Water Is Your Best Friend \_\_\_\_\_  
Water & Me \_\_\_\_\_

◆ First Grade  
Water Fun For You \_\_\_\_\_

◆ Second Grade  
About the Water Cycle \_\_\_\_\_

◆ Third Grade  
Water Play – English \_\_\_\_\_  
Juegos de Agua – Spanish \_\_\_\_\_

◆ Fourth Grade  
Conserve Water \_\_\_\_\_  
Watershed Protection \_\_\_\_\_  
CA Story (one per classroom) \_\_\_\_\_

◆ Fifth Grade  
The Story of Drinking Water \_\_\_\_\_  
Captain Hydro \_\_\_\_\_  
El Capitán Tlaloc – Spanish \_\_\_\_\_

◆ Sixth Grade  
Discover Storm Water \_\_\_\_\_  
Recycled Water \_\_\_\_\_

◆ Grades 7-12  
Project Water Science \_\_\_\_\_  
(one per classroom)  
Groundwater Education \_\_\_\_\_  
(one per classroom)

◆ Grades 9-12  
California Water Problems \_\_\_\_\_  
(one per classroom)

#### SPACE FOR TEACHER'S NOTES:

## WATER EDUCATION REQUEST FORM

To place orders for materials or request classroom or field study instruction, **copy and complete this form or order online at: [www.sonomacountywater.org](http://www.sonomacountywater.org)** (click on education)

Mail or fax this form to:  
Sonoma County Water Agency  
Water Education Program  
P.O. Box 11628  
Santa Rosa, CA 95406-1628  
Fax # (707) 528-2080

### Curriculum Guides

All About Water (K-3) \_\_\_\_\_  
Liquid Explorations (K-3) \_\_\_\_\_  
Dig In (K-4) \_\_\_\_\_  
Water Precious Water (2-6) \_\_\_\_\_  
Aquatic Habitats (2-6) \_\_\_\_\_  
Schoolyard Ecology (3-6) \_\_\_\_\_

### Supplemental Materials

(one per classroom)  
California Water Map – English \_\_\_\_\_  
California Water Map – Spanish \_\_\_\_\_  
Russian River Map \_\_\_\_\_  
Russian River Relief Map \_\_\_\_\_  
Use Water Wisely Poster \_\_\_\_\_  
Rain Gauge \_\_\_\_\_  
Water in Sonoma County Poster \_\_\_\_\_

### Student Incentives

(one per student)  
Pencil Sharpener \_\_\_\_\_  
Rulers \_\_\_\_\_  
Pencils \_\_\_\_\_  
Fish Erasers \_\_\_\_\_  
Static Water Conservation Stickers \_\_\_\_\_  
Colorful Animal Water Stickers \_\_\_\_\_  
Folders – Water Science A – Z \_\_\_\_\_  
Fish Tattoos \_\_\_\_\_  
Magnets \_\_\_\_\_

## Order form

Teacher \_\_\_\_\_

Grade Level \_\_\_\_\_

School \_\_\_\_\_

Phone # (\_\_\_\_\_) \_\_\_\_\_

Fax # (\_\_\_\_\_) \_\_\_\_\_

E-mail address \_\_\_\_\_

### Send Classroom Materials To:

School \_\_\_\_\_

Street Address (Do not list a P.O. Box)

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

*Orders are filled within two weeks of receipt and will be mailed to your school.*

### Instruction Request

Name \_\_\_\_\_

School \_\_\_\_\_

Classroom Instruction Grade 3 \_\_\_\_\_

Field Study Instruction Grade 5 \_\_\_\_\_

Grade 6 \_\_\_\_\_

*We will contact you regarding availability and scheduling.*

### Teacher Workshop Registration

Register me for the following workshops:

#### Water in Sonoma County

☐ Wednesday, October 29, 2008 • 3:00 – 6:00

☐ Saturday, November 8, 2008 • 9:00 – 12:00

#### Project WET

☐ Saturday, February 28, 2009 • 9:30 – 3:30



## LENDING LIBRARY ORDER FORM

To place an order, copy and complete this form and fax to (707) 528-2080 or order online at [www.sonomacountywater.org](http://www.sonomacountywater.org) (click on education). Videos and books can be mailed to you or you can pick them up at 404 Aviation Boulevard (off Airport Boulevard in Santa Rosa). Models cannot be mailed and must be picked up. All materials are loaned for a two week period.

Teacher \_\_\_\_\_

E-mail address \_\_\_\_\_

Grade Level \_\_\_\_\_

School \_\_\_\_\_

Address for Mailing Items:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**I would like to borrow  
the following videos / DVDs:**

1) \_\_\_\_\_

2) \_\_\_\_\_

3) \_\_\_\_\_

4) \_\_\_\_\_



**Please put a bag of books together for me. I am especially interested in books covering:**

- ☐ general water information
- ☐ water conservation
- ☐ fish and wildlife
- ☐ trees / botany
- ☐ nature guides
- ☐ watersheds
- ☐ wetlands
- ☐ folk tales
- ☐ weather and natural disasters
- ☐ habitats
- ☐ books in Spanish
- ☐ hands-on activities

### Printed Materials

- ☐ Layperson's Guides
- ☐ Resources for Environmental Literacy
- ☐ Classroom Set of "Where Does Your Water Come From?"
- ☐ MTBE Curriculum

### Games / Interactive

- ☐ Hydro Explorer
- ☐ No-Know Game
- ☐ Cal Alive

### Models:

- ☐ Enviroscape Model
- ☐ Groundwater Model







*The Sonoma County Water Agency provides clean, drinking water to 600,000 people in Sonoma and Marin counties. Our water supply system serves eight major cities and water districts in the North Bay who help support the Water Education Program. The principal contractors include: the cities of Santa Rosa, Petaluma, Rohnert Park, Sonoma, and Cotati, the Town of Windsor, and the North Marin and Valley of the Moon Water Districts.*

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